



DEPARTMENT OF  
**ENVIRONMENTAL  
PROTECTION**

MONTGOMERY COUNTY • MARYLAND

# Proprietary Underground Filtering Facilities

STORMWATER FACILITY MAINTENANCE PROGRAM

## What are proprietary underground filtering facilities?

Proprietary underground filtering facilities remove pollutants from stormwater runoff by allowing it to flow through a filtration system. These systems are made by various manufacturers and have special filter cartridges to remove pollutants. These facilities are located underground and include devices such as Aqua-Filter™, Bay-Filter™, and Storm-Filter™, among others. You can visit the manufacturers' websites for more information on your device.

## How do they work?

Underground filtering facilities collect and filter stormwater runoff from your site. Flow splitters are often used to send a certain quantity of untreated water, known as the "first flush," to an underground filtering facility. Stormwater flows into the facility through an underground inlet pipe and passes through filtration cartridges that remove pollutants. The filtered stormwater is then discharged downstream through an outlet pipe. This process removes pollutants and returns clean water back to the local

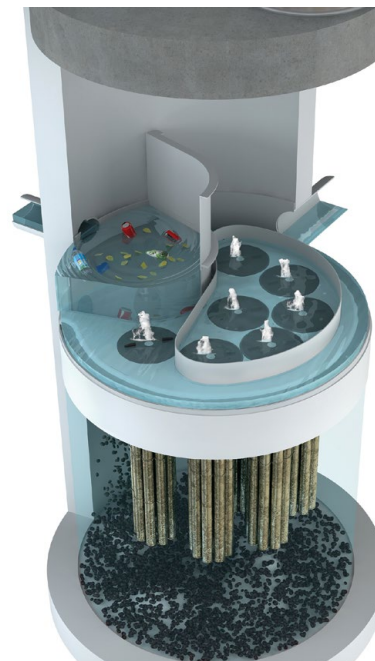
## Why are underground filtering facilities important?

- Remove pollutants
- Improve health of streams and rivers
- Help to make our waters fishable and swimmable
- Improve the quality of the Chesapeake Bay

## Why is it important to keep your underground filtering facilities maintained?

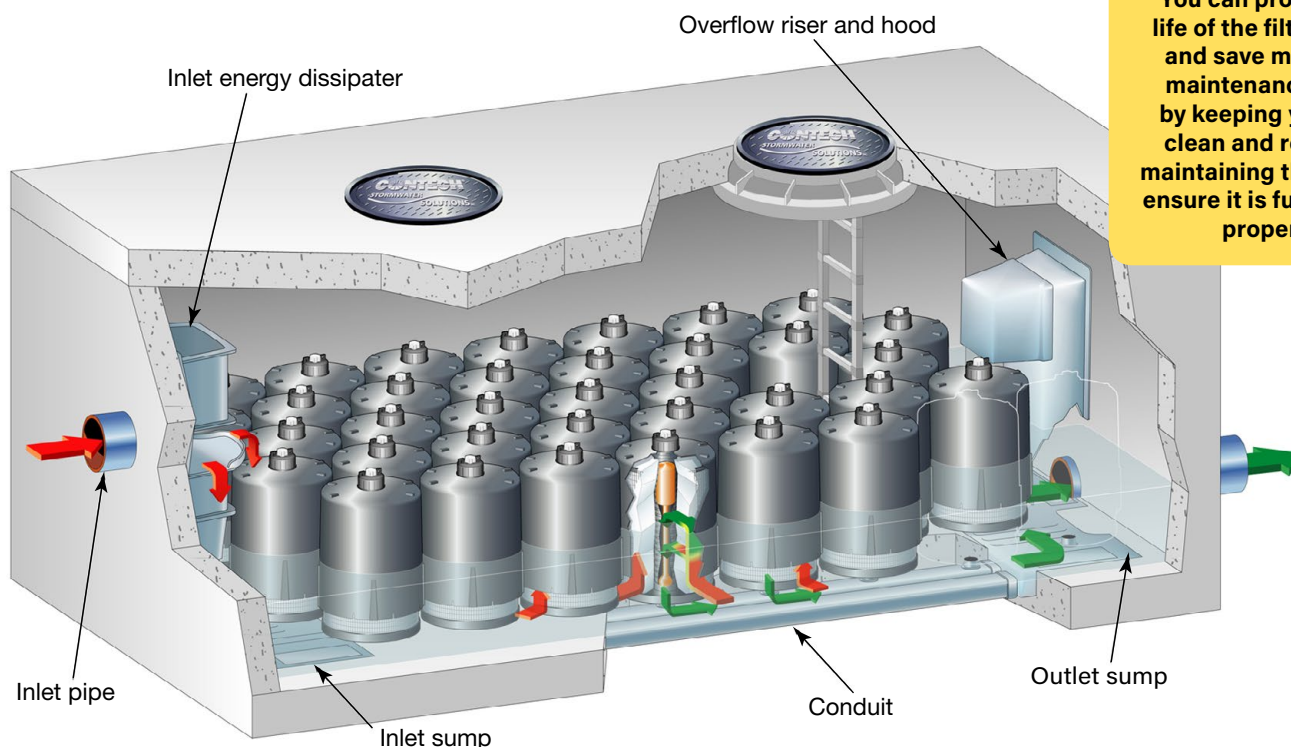
An unmaintained underground filtering facility may:

- Become clogged with sediment and debris, so water cannot be treated, allowing sediment and pollutants to enter our local streams
- Not function properly because filters have become worn out



*Jellyfish Filter™*

Source: Imbrium Systems



**You can prolong the life of the filter media and save money on maintenance costs by keeping your site clean and regularly maintaining the filter to ensure it is functioning properly.**

# Maintenance 101

Performing **preventive maintenance** regularly will prevent long-term damage and help avoid potential violations. These actions will keep your facility looking good and working correctly, which will save you money in the long term. Think of the preventive maintenance actions below as similar to preventive car maintenance (like changing the oil in your car every 3 months).

**Structural maintenance** is work done on the components of the filter that allow it to control rainwater and remove pollutants. Structural maintenance problems in the table below are things you should be looking out for. When they happen, call DEP for help (like calling your mechanic when the engine light comes on).

## PREVENTIVE MAINTENANCE

(Things you can do)

### Frequently

- Pick up trash, debris, or leaves around your property and in front of inlets to your proprietary underground filtering facility

### As needed

- Know the pollutant sources on your property, and try to eliminate the pollutants at the source
- Sweep paved areas on your property to remove pollutants such as sediment and sand
- Store chemicals, used oil, and pesticides in covered areas so these potential pollutants are not exposed to rainfall
- Do not stockpile sand or salt on your property unless they are in covered containment areas
- Do not wash your vehicles or mechanical equipment on paved areas, and prevent wash water from entering the storm drain system
- Mark your proprietary underground filtering facility inlets to ensure snow plow operators do not damage the facility

## STRUCTURAL MAINTENANCE

(Should only be performed by a contractor)

*The underground filtering facility should be pumped out, power washed, and cleaned annually, unless otherwise determined by DEP.*

### Problem:

### Possible Fix:

Missing or damaged manhole cover

Replace manhole cover

Trash, debris, oil and grease, or sediment accumulation within proprietary underground filtering facility

Remove and properly dispose of the trash, debris, or sediment

Missing steps/ladders

Repair or replace steps/ladders

Clogged pipes and trash racks

Remove and properly dispose of debris causing clogging

Clogged filter and standing water for more than 3 days after rain event

Replace filter media and/or cartridges

Corrosion of metal pipes

Repair or replace corroded metal parts

Damaged structural components (i.e., pipes, concrete, trash racks, pipe joints, proprietary unit, etc.)

Repair and/or replacement for these components to be determined by DEP

## Who is responsible for the maintenance?

As the property owner, YOU are responsible for all maintenance unless your hydrodynamic separator has been transferred to the DEP Stormwater Facility Maintenance Program. If you would like more information about transferring your flow splitter into this program, please visit [montgomerycountymd.gov/stormwater](http://montgomerycountymd.gov/stormwater).

Maintenance of underground storage structures must be performed by DEP-approved contractors with confined space certification. No one should enter the structure without proper training, certification, and permits for confined space entry. Entering underground storage structures without meeting these requirements is a violation of State law and could be dangerous or deadly. Please visit [montgomerycountymd.gov/stormwater](http://montgomerycountymd.gov/stormwater) for a list of approved and certified contractors.

## How will I know what maintenance is required?

DEP recommends owners use a certified contractor to pump-out, power wash, and clean their stormwater facility annually to ensure the facility is properly functioning and passes inspection. If DEP inspects the facility and finds maintenance issues, you will receive a notice of violation with a work order



showing the list of required maintenance and repairs. You will have 45 days from the date of the notice to hire a certified contractor to complete the maintenance and repairs. A civil citation may be issued if you have not complied with the maintenance and repair requirements.

## NEED HELP OR HAVE QUESTIONS?

DEP can answer your questions and provide additional guidance about maintaining your dry well.

Email us at [AskDEP@montgomerycountymd.gov](mailto:AskDEP@montgomerycountymd.gov), call the Montgomery County Customer Service Center at **3-1-1**, or visit our website: [montgomerycountymd.gov/stormwater](http://montgomerycountymd.gov/stormwater).